



SEQUENCE LISTING

<110> Wallach et al.

<120> Use of Caspase-8 Inhibitors for Modulating Hematopoiesis

<130> 30694/41943

<140> US 10/575,915

<141> 2006-04-14

<150> PCT/IL2004/000977

<151> 2004-10-26

<150> IL 158599

<151> 2003-10-26

<160> 23

<170> PatentIn version 3.3

<210> 1

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Single strand synthetic DNA oligonucleotide

<400> 1

agctggctgg tggcagatgg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Single strand synthetic DNA oligonucleotide

<400> 2

cgttgatgcc ggtgaacgtg

20

<210> 3

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> Single strand synthetic DNA oligonucleotide

<400> 3

tagcctcttt ggggttgttc tactg

25

<210> 4

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> Single strand synthetic DNA oligonucleotide

<400> 4
tggggcttcg ttttagtctct acttc

25

<210> 5
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 5
tagcctcttt ggggttgttc tactg

25

<210> 6
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 6
tagcctcttt ggggttgttc tactg

25

<210> 7
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 7
cgcggtcgac ttatcaagag gtagaagagc tgtaac

36

<210> 8
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 8
gcgaacacgc cgtgtttcaa gggc

24

<210> 9
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 9

ggaaacaagg tggtagctga da

22

<210> 10
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 10
cctgggtcaa cacaagatgc t

21

<210> 11
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 11
agccctcctct accgcccagaa

20

<210> 12
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 12
gtgccagact cctccttgct

20

<210> 13
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<220>
<221> misc_feature
<222> (1)..(1)
<223> 6-FAM (6-carboxy-fluorescein) conjugated nucleotide

<220>
<221> misc_feature
<222> (21)..(21)
<223> MGB(minor groove binder) conjugated nucleotide

<400> 13
ttaacttcct cacttgatca t

21

- <210> 14

```

<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<220>
<221> misc_feature
<222> (1)..(1)
<223> 6-FAM (6-carboxy-fluorescein) conjugated nucleotide

<220>
<221> misc_feature
<222> (16)..(16)
<223> MGB(minor groove binder) conjugated nucleotide

<400> 14
accagaaccg agcaaa                                         16

<210> 15
<211> 64
<212> DNA
<213> Artificial sequence

<220>
<223> SiRNA sense oligonucleotide

<400> 15
gatccccgtt cctgaggcctg gactacttca agagagtagt ccaggctcag gaacttttg   60
gaaa                                         64

<210> 16
<211> 64
<212> DNA
<213> Artificial sequence

<220>
<223> SiRNA anti-sense oligonucleotide

<400> 16
agctttcca aaaagttcct gagcctggac tactctcttg aagttagtcca ggctcaggaa   60
cggg                                         64

<210> 17
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand synthetic DNA oligonucleotide

<400> 17
ataaacttcgt atagcataaca ttatacgaag ttat                                         34

<210> 18

```

<211> 34
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Single strand synthetic DNA oligonucleotide

 <400> 18
 ataacttcgt ataatgtatg ctatacgaag ttat 34

<210> 19
 <211> 1975
 <212> DNA
 <213> Mus musculus

<400> 19
 ctaaacattc ggaggcattt ctgtccctta tgccctagtt ctctcagttg tctttcattc 60
 tgacttcgggt gcttaaaagt ccagcttctc ggaatcggtta gcaaaccctct gtgagccggc 120
 gtggaacagg aagtgagttac agttctgggg agcgccggcc cgggctggag gtcggaaag 180
 cccaagccag cgaggccctc gcccggactg gagttgtgac cggcgccggca ggtactcggc 240
 cacaggttac agctcttcta cctcttgata agaatggatt tccagagttg tctttatgct 300
 attgctgaag aactgggcag tgaagacctg gctgccctca agttcctgtg cttggactac 360
 atccccacaca agaagcagga gaccatcgag gatgccaga agctatttct gaggctgcgg 420
 gaaaagggga tttttggagga aggcaatctg tctttcctga aagagctgct tttccacattc 480
 agtcgggtggg acctgctggt caacttcctta gactgcaacc gagaggagat ggtgagagag 540
 ctgcgggatc cagacaatgc ccagatttct ccctacaggg tcattgtctt taagctctca 600
 gaagaagtga gcgagttgga attgagatct tttaagttcc ttttgaacaa tgagatcccc 660
 aaatgttaagc tggaaagatga cttgagccctg cttgaaattt ttgttagaaat ggagaagagg 720
 accatgctgg cagaaaataa cttggaaacc ctaaaatcaa tctgtgacca ggtcaacaag 780
 agcctgctgg ggaagatcga ggattatgaa agatcaagca cagagagaag aatgagccctt 840
 gaaggaaggg aagagttgcc accttcagtt ttggatgaga tgagccctca aatggcggaa 900
 ctgtgtgact cgccaaagaga acaagacagt gagtcacggc cttcagacaa agtttaccaa 960
 atgaagaaca aacctcgaaa atactgtctg atcatcaaca atcatgattt cagcaaggcc 1020
 cggaaagaca taacccaaact ccgaaaaatg aaggacagaa aaggaacaga ctgtgataaa 1080
 gaggctctga gtaagacatt taaggagctt catttgaga tagtatctt cgtacgtgc 1140
 actgcaaatg aaatccacga gattcttagaa ggctacaaa ggcacacca caagaacaaa 1200
 gactgcttca tctgctgtat cctatcccac ggtgacaagg gtgtcgctca tggaaacggat 1260
 gggaaaggagg cctccatcta tgacctgaca tcttacttca ctggttcaaa gtgccttcc 1320
 ctgtctggga aacccaaatg ctttttcatt caggcttgcc aaggaagtaa cttccagaaa 1380

ggagtgcctg atgaggcagg	cttcgagcaa cagaaccaca	ctttagaagt ggattcatca	1440
tctcacaaga actatattcc	ggatgaggca gactttctgc	tgggaatggc tacggtaag	1500
aactgcgtt cctaccgaga	tcctgtaat ggaacctgg	atattcagtc actttgccag	1560
agcctgaggg aaagatgtcc	tcaaggagat gacattcta	gcattcgtac tggcgtgaac	1620
tatgacgtga gcaataaaga	cgacaggagg aacaaggaa	agcagatgcc acagcccacc	1680
ttcacactac ggaagaagct	cttcttcct ccctaattgat	gtgtgctctc cacagttcac	1740
atggcttatac tgtgcactt	tgtgtggatg agtctaattt	attttttaga atttcttttg	1800
ctttgaatt tacatttaca	taattttccc ttttcttccc	tttaaacccct tctttgttat	1860
gttccaattt caaatacatg	gcctctttc tcattaactg	ttgtacacac acatacatac	1920
acacacacac acacacacac	acatttctaa atataacctg	tatactatca ctgt	1975

<210> 20
<211> 420
<212> PRT
<213> Homo sapiens

<400> 20

Ser Phe Leu Lys Glu Leu Leu Phe Arg Ile Asn Arg Leu Asp Leu Leu			
1	5	10	15

Ile Thr Tyr Leu Asn Thr Arg Lys Glu Glu Met Glu Arg Glu Leu Gln		
20	25	30

Thr Pro Gly Arg Ala Gln Ile Ser Ala Tyr Arg Val Met Leu Tyr Gln		
35	40	45

Ile Ser Glu Glu Val Ser Arg Ser Glu Leu Arg Ser Phe Lys Phe Leu		
50	55	60

Leu Gln Glu Glu Ile Ser Lys Cys Lys Leu Asp Asp Asp Met Asn Leu			
65	70	75	80

Leu Asp Ile Phe Ile Glu Met Glu Lys Arg Val Ile Leu Gly Glu Gly		
85	90	95

Lys Leu Asp Ile Leu Lys Arg Val Cys Ala Gln Ile Asn Lys Ser Leu		
100	105	110

Leu Lys Ile Ile Asn Asp Tyr Glu Glu Phe Ser Lys Glu Arg Ser Ser		
115	120	125

Ser Leu Glu Gly Ser Pro Asp Glu Phe Ser Asn Gly Glu Glu Leu Cys		
130	135	140

Gly Val Met Thr Ile Ser Asp Ser Pro Arg Glu Gln Asp Ser Glu Ser
145 150 155 160

Gln Thr Leu Asp Lys Val Tyr Gln Met Lys Ser Lys Pro Arg Gly Tyr
165 170 175

Cys Leu Ile Ile Asn Asn His Asn Phe Ala Lys Ala Arg Glu Lys Val
180 185 190

Pro Lys Leu His Ser Ile Arg Asp Arg Asn Gly Thr His Leu Asp Ala
195 200 205

Gly Ala Leu Thr Thr Phe Glu Glu Leu His Phe Glu Ile Lys Pro
210 215 220

His Asp Asp Cys Thr Val Glu Gln Ile Tyr Glu Ile Leu Lys Ile Tyr
225 230 235 240

Gln Leu Met Asp His Ser Asn Met Asp Cys Phe Ile Cys Cys Ile Leu
245 250 255

Ser His Gly Asp Lys Gly Ile Ile Tyr Gly Thr Asp Gly Gln Glu Ala
260 265 270

Pro Ile Tyr Glu Leu Thr Ser Gln Phe Thr Gly Leu Lys Cys Pro Ser
275 280 285

Leu Ala Gly Lys Pro Lys Val Phe Phe Ile Gln Ala Cys Gln Gly Asp
290 295 300

Asn Tyr Gln Lys Gly Ile Pro Val Glu Thr Asp Ser Glu Glu Gln Pro
305 310 315 320

Tyr Leu Glu Met Asp Leu Ser Ser Pro Gln Thr Arg Tyr Ile Pro Asp
325 330 335

Glu Ala Asp Phe Leu Leu Gly Met Ala Thr Val Asn Asn Cys Val Ser
340 345 350

Tyr Arg Asn Pro Ala Glu Gly Thr Trp Tyr Ile Gln Ser Leu Cys Gln
355 360 365

Ser Leu Arg Glu Arg Cys Pro Arg Gly Asp Asp Ile Leu Thr Ile Leu
370 375 380

Thr Glu Val Asn Tyr Glu Val Ser Asn Lys Asp Asp Lys Lys Asn Met
385 390 395 400

Gly Lys Gln Met Pro Glu Pro Thr Phe Thr Leu Arg Lys Lys Leu Val
405 410 415

Phe Pro Ser Asp
420

<210> 21
<211> 2827
<212> DNA
<213> Homo sapiens

<400> 21
gattctgcct ttctgttgg gggaaagtgtt ttcacagggtt ctcctccctt tatcttttgt 60
gtttttttc aagccctgct gaatttgcta gtcaactcaa caggaagtga ggccatggag 120
ggaggcagaa gagccagggt gtttattgaa agtagaaagaa acttcttcct gggagcctt 180
cccacccccc tccctgctga gcacgtggag ttaggcaggt tagggactc ggagactgcg 240
atgggccag gaaagggtgg agcggattat attctcctgc ctttaaaaaa gatggacttc 300
agcagaaaatc tttatgatat tggggAACAA ctggacagtg aagatctggc ctccctgaag 360
ttcctgagcc tggactacat tccgcaaagg aagcaagaac ccatcaagga tgccttgatg 420
ttattccaga gactccagga aaagagaatg ttggaggaaa gcaatctgtc ctccctgaag 480
gagctgctct tccgaattaa tagactggat ttgctgatta cctacctaaa cactagaaag 540
gaggagatgg aaaggaaact tcagacacca ggcagggtc aaatttctgc ctacagggtc 600
atgctctatc agatttcaga agaagtggc agatcagaat tgaggcttt taagtttctt 660
ttgcaagagg aaatctccaa atgcaaactg gatgatgaca tgaacctgtc ggatattttc 720
atagagatgg agaagagggt catcctgggaa gaaggaaagt tggacatcct gaaaagagtc 780
tgtccccaaa tcaacaagag cctgctgaag ataatacaacg actatgaaga attcagcaaa 840
gagagaagca gcagccttga aggaagtgc gatgaatttt caaatgggaa ggagttgtgt 900
ggggtaatga caatctcgga ctctccaaga gaacaggatgt gatcacaatttttgc 960
aaagtttacc aaatgaaaag caaacctcggtt ggtactgtc tgatcatcaa caatcacaat 1020
tttgcaaaag cacgggagaa agtccccaaa cttcacagca ttagggacag gaatggaaaca 1080
cacttggatg cagggctttt gaccacgacc tttgaagagc ttcattttga gatcaagccc 1140
cacgtgact gcacagttaga gcaaatttat gagatttga aaatctacca actcatggac 1200
cacagtaaca tggactgctt catctgatgt atcctctccc atggagacaa aggcatcatc 1260
tatggactg atggacagga ggccccatc tatgagctga catctcagtt cactggtttgc 1320
aagtgcctt cccttgctgg aaaacccaaa gtgtttta ttcaggcttgc tcagggggat 1380
aactaccaga aaggataacc tggactgact gattcagagg agcaacccta ttttagaaatg 1440
gatttatcat cacctcaaac gagatatac ccggatgagg ctgactttct gctggggatg 1500

<210> 22
<211> 528
<212> PRT
<213> *Homo sapiens*

```
<220>
<221> misc_feature
<222> (339)..(339)
<223> Xaa can be any naturally occurring amino acid

<400> 22
```

Met Asp Phe Ser Arg Asn Leu Tyr Asp Ile Gly Glu Gly Ile Asn Leu
 1 5 10 15

Asp Ser Glu Asp Leu Ala Ser Leu Lys Phe Leu Ser Leu Asp Tyr Ile
20 25 30

Pro Gln Arg Lys Gln Glu Pro Ile Lys Asp Ala Leu Met Leu Phe Gly
35 40 45

Ile Asn Arg Leu Gly Ile Asn Glu Lys Arg Met Leu Glu Glu Ser Asn
50 55 60

Leu Ser Phe Leu Lys Glu Leu Leu Phe Arg Ile Asn Arg Leu Asp Leu
65 70 75 80

Leu Ile Thr Tyr Leu Asn Thr Arg Lys Glu Glu Met Glu Arg Glu Leu
85 90 95

Gly Ile Asn Thr Pro Gly Ile Tyr Arg Ala Gln Ile Ser Ala Tyr Arg
100 105 110

Val Met Leu Tyr Gly Ile Asn Ile Ser Glu Glu Val Ser Arg Ser Glu
115 120 125

Leu Arg Ser Phe Lys Phe Leu Leu Gln Glu Glu Ile Ser Lys Cys Lys
130 135 140

Leu Asp Asp Asp Met Asn Leu Leu Asp Ile Phe Ile Glu Met Glu Lys
145 150 155 160

Arg Val Ile Leu Gly Glu Gly Ile Tyr Lys Leu Asp Ile Leu Lys Arg
165 170 175

Val Cys Ala Gly Ile Asn Ile Asn Lys Ser Leu Leu Lys Ile Ile Asn
180 185 190

Asp Tyr Glu Glu Phe Ser Lys Gly Ile Tyr Glu Glu Leu Cys Gly Val
195 200 205

Asn Glu Thr Thr Ile Ser Asp Ser Pro Arg Glu Gly Ile Asn Asp Ser
210 215 220

Glu Ser Gln Thr Leu Asp Lys Val Tyr Gly Ile Asn Met Lys Ser Lys
225 230 235 240

Pro Arg Gly Tyr Cys Leu Ile Ile Asn Asn His Asn Phe Ala Lys Ala
245 250 255

Arg Glu Lys Val Pro Lys Leu His Ser Ile Arg Asp Arg Asn Gly Thr
260 265 270

His Leu Asp Ala Gly Ala Leu Thr Thr Thr Phe Glu Glu Leu His Phe
275 280 285

Glu Ile Lys Pro His Asp Asp Cys Thr Val Glu Gln Ile Tyr Glu Ile
290 295 300

Leu Lys Ile Tyr Gly Ile Asn Leu Met Asp His Ser Asn Met Asp Cys
305 310 315 320

Phe Ile Cys Cys Ile Leu Ser His Gly Ile Tyr Asp Lys Gly Ile Ile
325 330 335

Thr Tyr Xaa Gly Ile Tyr Thr Asp Gly Ile Tyr Gly Ile Asn Glu Ala
340 345 350

Pro Ile Tyr Glu Leu Thr Ser Gln Phe Thr Gly Ile Tyr Leu Lys Cys
355 360 365

Pro Ser Leu Ala Gly Lys Pro Lys Val Phe Phe Ile Gly Ile Asn Ala
370 375 380

Cys Gly Ile Asn Gly Asp Asn Tyr Gly Ile Asn Lys Gly Ile Pro Val
385 390 395 400

Ala Ile Glu Thr Asp Ser Glu Glu Gly Ile Asn Pro Tyr Leu Glu Met
405 410 415

Asp Leu Ser Ser Pro Gln Thr Arg Tyr Ile Pro Asp Glu Ala Asp Phe
420 425 430

Leu Leu Gly Ile Tyr Met Ala Thr Val Ala Ile Asn Asn Cys Val Ser
435 440 445

Tyr Arg Asn Pro Ala Glu Gly Thr Trp Tyr Ile Gly Ile Asn Ser Leu
450 455 460

Cys Gly Ile Asn Ser Leu Arg Glu Arg Cys Pro Arg Gly Ile Tyr Asp
465 470 475 480

Asp Ile Leu Thr Ile Leu Thr Glu Val Ala Ile Asn Tyr Glu Val Ser
485 490 495

Asn Lys Asp Asp Lys Lys Asn Met Gly Ile Tyr Lys Gly Ile Asn Met
500 505 510

Pro Gln Pro Thr Phe Thr Leu Arg Lys Lys Leu Val Phe Pro Ser Asp
515 520 525

<210> 23
<211> 2559
<212> DNA
<213> Homo sapiens

<400> 23
cctttaaaaa agatggactt cagcagaaat ctttatgata ttggggaca actggacagt 60
gaagatctgg ctcctcaaa gttcctgagc ctggactaca ttccgcaaag gaagcaagaa 120
cccatcaagg atgccttgat gttattccag agactccagg aaaagagaat gttggaggaa 180
agcaatctgt cttcctgaa ggagctgctc ttccgaatta atagactgga tttgctgatt 240
acctacctaa acactagaaa ggaggagatg gaaagggAAC ttcagacacc aggcaaggct 300
caaattctg cctacagggt catgctctat cagatttcag aagaagttag cagatcgaa 360
ttgaggtctt ttaagttct tttgcaagag gaaatctcca aatgcaaact ggatgtgac 420
atgaacctgc tggatatttt catagagatg gagaagaggg tcatcctggg agaaggaaag 480
ttggacatcc tgaaaagagt ctgtccccaa atcaacaaga gcctgctgaa gataatcaac 540
gactatgaag aattcagcaa aggggaggag ttgtgtgggg taatgacaat ctcggactct 600
ccaagagaac aggatagtga atcacagact ttggacaaag tttaccaaatt gaaaagcaaa 660
cctcggggat actgtctgat catcaacaat cacaatttg caaaagcacg ggagaaagtg 720
cccaaacttc acagcattag ggacaggaat ggaacacact tggatgcagg ggcttgacc 780
acgaccttg aagagctca ttttgagatc aagccccacg atgactgcac agtagagcaa 840
atctatgaga ttttggaaat ctaccaactc atggaccaca gtaacatgga ctgcttcatc 900
tgctgtatcc tctccatgg agacaaaggc atcatctatg gcactgatgg acaggaggcc 960
cccatctatg agctgacatc tcagttcaact ggttgaagt gccctccct tgctggaaaa 1020
cccaaagtgt ttttattca ggcttgcag gggataact accagaaagg tatacctgtt 1080
gagactgatt cagaggagca accctattta gaaatggatt tatcatcacc tcaaacgaga 1140
tatatcccgg atgaggctga ctttctgctg gggatggcca ctgtgaataa ctgtgtttcc 1200
taccgaaacc ctgcagaggg aacctggtag atccactcac tttgcaagag cctgagagag 1260
cgatgtcctc gaggcgatga tattctcacc atcctgactg aagtgaacta tgaagtaagc 1320
aacaaggatg acaagaaaaa catggggaaa cagatgcctc agcctacttt cacactaaga 1380
aaaaaaacttg tcttccttc tgattgatgg tgctatTTT tttgtttgt tttgtttgt 1440
tttttgaga cagaatctcg ctctgtcgcc caggctggag tgcagtggcg tgatctcgcc 1500
tcaccgcaag ctccgcctcc cgggttcacg ccattctcct gcctcagcct cccgagtagc 1560
tgggactaca ggggcccccc accacacctg gctaattttt taaaaatatt ttttagtagag 1620
acagggtttc actgtgttag ccagggtggc cttgatctcc tgacctcgat atccacccac 1680
ctcggcctcc caaagtgctg ggattacagg cgtgagccac cgccgcctggc cgatggtaact 1740

attagatat aacactatgt ttatTTacta attttctaga ttttctactt tattaattgt	1800
tttgcacttt ttataaagag ctaaagttaa ataggatatt aacaacaata acactgtctc	1860
ctttctctta tgcttaaggc tttgggaatg ttttagctg gtggcaataa ataccagaca	1920
cgtacaaaat ccagctatga atatagaggg cttatgattc agattgttat ctatcaacta	1980
taagcccact gttaatattc tattaacttt aattctcttt caaagctaaa ttccacacta	2040
ccacattaaa aaaatttagaa agtagccacg tatggtggt catgtctata atcccagcac	2100
tttgggaggt tgaggtggga ggatttgctt gaacccaaga ggtccaaggc tgcagtgagc	2160
catgttcaca ccgctgcact caagcttggg tgacagagca agacccgtc cccaaaaaaaa	2220
ttttttttt aataaaccctt aatttggggaaaactttttaaaaattcaaa tgatttttac	2280
aagttttaaa taagctctcc ccaaacttgc tttatgcctt cttattgctt ttatgatata	2340
tatatgcttg gctaactata tttgctttt gctaacaatg ctctgggtc ttttatgca	2400
tttgcatttg ctcttcatc tctgcttggaa ttatTTaaa tcatttagaa ttaagttatc	2460
tttaaaattt aagtatcttt tttccaaaac atttttaat agaataaaaat ataatttgat	2520
cttaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa	2559